



Applicant(s) Eric J. Horvitz, et al. Docket No. MS158283.2/MSFTP293USA  
Serial No. 10/686,198 Filing Date 10/15/03 Atty(s) HSA/JRS/rad  
Title METHODS AND APPARATUS FOR PREDICTING AND SELECTIVELY...  
Mailed 5-26-04 Due Date \_\_\_\_\_ Exp. Mail No. \_\_\_\_\_

- ☐ Patent Application (☐ New ☐ CON ☐ DIV ☐ CIP ☐ CPA ☐ PCT ☐ Provisional)
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RECEIPT ACKNOWLEDGED



DOCKET NO.: MS158283.2/MSFTP293USA

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re patent application of

Applicants: **Eric J. Horvitz, et al.**  
Serial No.: **10/686,198**  
Filed: **October 15, 2003**  
For: **Methods and Apparatus for Predicting and Selectively Collecting Preferences Based on Personality Diagnosis**  
Art Unit: **3714**  
Examiner: **Chanda L. Harris**

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
Alexandria, Virginia 22313-1450

Sir:

1. Pursuant to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the patents, publications and other information listed on the attached PTO-1449. A copy of each listed document is enclosed except for: (a) pending applications or (b) those previously cited or submitted to the Office in the following application(s) upon which this application relies for an earlier filing date under 35 U.S.C. 120; or (c) U.S. Patent(s) and published applications(s) since the subject application was filed after June 30, 2003.

Serial No.: 09/629,217 \_\_\_\_\_  
Filing Date: 7/31/2000 \_\_\_\_\_

Regarding any document, publication or other information for which a date is not given on the attached PTO-1449, Applicant(s) believe(s) the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information, should issue arise.

2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the following document(s):

- (a) ☐ Copy of each English language version of a search report indicating the degree of relevance found by the foreign office of each document being submitted from the search report.
- (b) ☐ Attachment entitled "Concise Explanation of Relevance of Non-English Language Documents".

3. Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):

- (a) ☐ Within 3 months of the filing date or date of entry into the National Stage.
- (b) ☐ Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 50-1063 for consideration of this Statement.

(c) X After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance.

(1) \_\_\_ The required certification is given below, or

(2) \_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement, or

(3) X Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 50-1063  
(Ref. No. MSFTP293USA).

(d) \_\_\_ After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee.  
Petition hereby is made for consideration of this Statement and the required certification is indicated below.

(1) \_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(i)(1), or

(2) \_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(i)(1) to Deposit Account No. 50-1063.


4. Certification (if applicable)

(a) \_\_\_ The undersigned hereby certifies that each item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement.

(b) \_\_\_ The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the undersigned's knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than 3 months prior to the filing of this Statement.

5. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1063.

Respectfully Submitted,

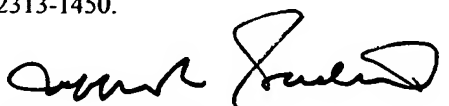
By   
Jeffrey R. Sadlowski  
Reg. No. 47,914

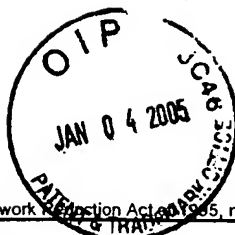
Amin & Turocy, LLP  
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1900 East 9<sup>th</sup> Street  
Cleveland, Ohio 44114  
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I hereby certify that this correspondence (along with any paper referenced as being attached or enclosed) is being deposited on the below date with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, Alexandria, Virginia 22313-1450.

Date: 5-26-2004

  
Jeffrey R. Sadlowski



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 5

**Complete if Known**

Application Number	10/686,198
Filing Date	10/15/2003
First Named Inventor	Eric J. Horvitz
Art Unit	3714
Examiner Name	Harris, Chanda L.
Attorney Docket Number	MS158283.2/MSFTP293USA

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 6,487,539	11-26-2002	Aggarwal et al.	
		US- 2002/0107853	08-08-2002	Hofmann et al.	
		US- 6,405,159	06-11-2002	Bushey et al.	
		US- 2002/0065802 A1	05-30-2002	Uchiyama	
		US- 2002/0052873	05-02-2002	Delgado et al.	
		US- 2002/0045154	04-18-2002	Wood et al.	
		US- 6,353,813	03-05-2002	Breese et al.	
		US- 6,345,264	02-05-2002	Breese et al.	
		US- 2001/0013009	08-09-2001	Greening, et al.	
		US- 6,272,467	08-07-2001	Durand et al.	
		US- 6,236,978	05-22-2001	Tuzhilin	
		US- 6,199,076	03-06-2001	Logan et al.	
		US- 6,185,534	02-06-2001	Breese et al.	
		US- 6,144,964	11-02-2000	Breese et al.	
		US- 6,018,738	01-25-2000	Breese et al.	
		US- 5,918,014	06-29-1999	Robinson	
		US- 5,884,282	03-16-1999	Robinson	
		US- 5,842,199	11-24-1998	Miller et al.	
		US- 5,704,017	12-30-1997	Heckerman et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		JP 2001209723 A	08-2001	Masato et al.		

Examiner  
SignatureDate  
Considered

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(Use as many sheets as necessary)*

Sheet	2	of	5
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**Complete if Known**

Application Number	10/686,198
Filing Date	10/15/2003
First Named Inventor	Eric J. Horvitz
Art Unit	3714
Examiner Name	Harris, Chanda L.
Attorney Docket Number	MS158283.2/MSFTP293USA

## U. S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

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				Examiner Name	Harris, Chanda L.
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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		JOAQUIN DELGADO, et al., Memory-Based Weighted-Majority Prediction, Nagoya Institute of Technology, 1999, 5 pages, Nagoya, Japan.	
		WILLIAM W. COHEN, et al., Learning to Order Things, Journal of Artificial Intelligence Research, 1999, pp. 243-270, Vol. 10.	
		J. BEN SCHAFER, et al., Recommender Systems in E-Commerce, E-COMMERCE 99, 1999, pp. 158-166, Denver, Colorado, USA.	
		LYLE H. UNGAR, et al., A Formal Statistical Approach to Collaborative Filtering, CONALD'98, 1998, 6 pages.	
		LYLE H. UNGAR, et al., Clustering Methods for Collaborative Filtering, AAAI Workshop on Recommendation Systems, 1998, 16 pages.	
		CHUMKI BASU, et al., Recommendation as Classification: Using Social and Content-Based Information in Recommendation, Proceedings AAAI-98, 1998, 5 pages.	
		JOHN S. BREESE, et al., Empirical Analysis of Predictive Algorithms for Collaborative Filtering, Microsoft Research, Proceedings of the Fourteenth Conference on Uncertainty in Artificial Intelligence, 1998, 10 pages, Madison, Wisconsin, USA.	
		DANIEL BILLSUS, et al., Learning Collaborative Information Filters, Proceedings of the Fifteenth International Conference on Machine Learning, 1998, pp. 46-54.	
		ATSUYOSHI NAKAMURA, et al., Collaborative Filtering using Weighted Majority Prediction Algorithms, Machine Learning: Proceedings of the Fifteenth International Conference, 1998, pp. 395-403.	
		YOAV FREUND, et al., An Efficient Boosting Algorithm for Combining Preferences, Proceedings of ICML-98, 1998, pp. 170-178.	

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		PAUL RESNICK, et al., Recommender Systems, Communications of the ACM, 1997, pp.56-58, Vol. 40- No. 3.	
		JOSEPH A. KONSTAN, et al., GroupLens: Applying Collaborative Filtering to Usenet News, Communications of the ACM, 1997, pp. 77-87, Vol. 40-No. 3.	
		HENRY KAUTZ, et al., The Hidden Web, American Association for Artificial Intelligence, 1997, pp. 27-36.	
		THOMAS HOFMANN, et al., Active Data Clustering, NIPS'97, 1997, 7 pages.	
		ALEXANDER CHISLENKO, Automated Collaborative Filtering and Semantic Transports, 1997, 17 pages.	
		UPENDRA SHARDANAND, et al., Social Information Filtering: Algorithms for Automating "Word of Mouth", CHI'95, 1995, pp. 210-217, Denver, Colorado, USA.	
		PAUL RESNICK, et al., GroupLens: An Open Architecture for Collaborative Filtering of Netnews, CSCW'94, 1994, pp. 175-186, Chapel Hill, North Carolina, USA.	
		HARRIS DRUCKER, et al., Improving Performance in Neural Networks Using a Boosting Algorithm, Advances in Neural Information Processing, 1993, pp. 42-49.	
		DAVID GOLDBERG, et al., Using Collaborative Filtering to Weave an Information Tapestry, Communications of the ACM, 1992, pp. 61-68, Vol. 35-No. 12.	
		ERIC J. HORVITZ, et al., Decision Theory in Expert Systems and Artificial Intelligence, Journal of Approximate Reasoning, 1988, 51 pages.	

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		JUDEA PEARL, Probabilistic Reasoning in Intelligent Systems: Networks of Plausible Inference, Morgan Kaufmann Publishers, Inc., 1988, pp. 313-318, San Francisco, California, USA.	
		HOWARD RAIFFA, DECISION ANALYSIS: Introductory Lectures on Choices Under Uncertainty, Addison-Wesley Publishing Company, 1970, pp. 39-43, Reading, Massachusetts, USA.	

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